

STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

Commercial Provisions

Log No. 146 TAG Revision 8/27/21

Washington State Energy Code Development Standard Energy Code Proposal Form

Residential Provisions

Code Section # C406.1
Brief Description:
This proposal increases the amount of Additional Efficiency Credits required in Section C406 by 50% to align with code stringency goals set by the State of WA. This requirement would increase overall building performance by approximately 3% (based on assumptions of 1% per credit achieved, with six credits currently required).
Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use <u>underline</u> for new text and strikeout for text to be deleted.)
C406.1 Additional energy efficiency credit requirements. New buildings and changes in space conditioning, change of occupancy and building additions in accordance with Chapter 5 shall comply with sufficient packages from Table C406.1 so as to achieve a minimum number of six nine-seven credits. Each area shall be permitted to apply for different packages provided all areas in the building comply with the requirement for six nine-seven credits. Areas included in the same permit within mixed use buildings shall be permitted to demonstrate compliance by an area weighted average number of credits by building occupancy achieving a minimum number of six nine-seven credits.
Exceptions: 1. Low energy spaces in accordance with Section C402.1.1.1 and equipment buildings in accordance with Section C402.1.2 shall comply with sufficient packages from Table C406.1 to achieve a minimum number of three five four credits. 2. Building additions that have less than 1,000 square feet of conditioned floor area shall comply with sufficient packages from Table C406.1 to achieve a minimum number of three five four credits. C406.1.1 Tenant spaces. Initial tenant improvement shall comply with sufficient packages from Table C406.1 to achieve a minimum number of six seven credits. In buildings with multiple tenant spaces, each tenant space is permitted to apply for different packages provided all areas in the building comply with the requirement for six nine seven credits. The references to seven credits shall be changed to 8 credits if 103 or 136 do not pass or nine if both do not pass.

Purpose of code change:

Code being amended:

To increase code stringency to more closely align with code stringency improvement goals set by the State of WA.

Your amendment must meet one of the following criteria. Select at least one:

Addresses a critical life/safety need.			Consistency with state or federal regulations.		
 ☐ The amendment clarifies the intent or application of the code. X ☐ Addresses a specific state policy or statute. (Note that energy conservation is a state policy) 			☐ Addresses a unique character of the state.☐ Corrects errors and omissions.		
Check the building types that would be impacted by your code change:					
Single family/duplex/townhome		X Multi-family 4 + stories		X Institutional	
☐ Multi-family 1 − 3 stories		X Commercial / Retail		Industrial	
Your name	Mark Frankel		Email address	mark@ecotope.com	
Your organization	Ecotope, Inc.		Phone number	206-596-4710	
Other contact name Jonathan Heller					
Instructions: Send this form as an email attachment, along with any other documentation available, to:					

<u>Instructions</u>: Send this form as an email attachment, along with any other documentation available, to: sbcc@des.wa.gov. For further information, call the State Building Code Council at 360-407-9278.

Economic Impact Data Sheet

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants and businesses.

This proposal will improve building energy performance by approximately 3%, according to previous estimates of the impact of additional efficiency credits (three additional credits are required in this proposal). Some additional investment will be required to achieve this energy savings benefit, as has been documented previously in analysis of Section C406.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost **Analysis tool** and **Instructions**; use these **Inputs**. **Webinars on the tool can be found <u>Here</u> and <u>Here</u>)**

\$Click here to enter text./square foot (For residential projects, also provide \$Click here to enter text./ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

The cost of C406 compliance has been studied repeatedly by various organizations, including PNNL, NBI, Skanska, and other organizations. Additional proposed changes to C406 requirements in this code cycle are also likely to include additional cost analysis and references. Rather than duplicate these analyses, current and previous cost data will be collected into a single reference location subsequent to various C406 proposals being made available in this code proposal cycle.

Provide your best estimate of the annual energy savings (or additional energy use) for your code change proposal?

Previous analysis of Additional Efficiency Credits in Section C406 suggested that each credit saved approximately 1% of total building energy. This proposal requires the achievement of 3 additional points in new construction, for a total savings of 3% of total building energy use, and additional carbon savings.

Click here to enter text.KWH/ square foot (or) Click here to enter text.KBTU/ square foot

(For residential projects, also provide Click here to enter text.KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

This proposal will lead to increased enforcement time for Section C406, since additional systems and strategies will need to be reviewed to demonstrate achievement of additional credits in Section C406.